

WHAT IS CLAIMED IS:

1. A composition for maintaining a non-enveloped viral vector comprising:
 - (a) about 1-25% (wt./vol.) trehalose,
 - (b) about 0.05-2 mM of a divalent metal salt, a cationic polymer, or a combination thereof,
 - (c) a multiplicity of non-enveloped viral vector particles, and
 - (d) a liquid carrier.
2. The composition of claim 1, wherein the composition comprises about 0.05-2 mM of a divalent metal salt.
3. The composition of claim 2, wherein the composition comprises about 0.05-2 mM MgCl₂.
4. The composition of claim 2, wherein the composition further comprises a nonionic surfactant in a concentration of about 0.001-0.015% (wt./vol.).
5. The composition of claim 3, wherein the nonionic surfactant is polysorbate 80.
6. The composition of claim 2, wherein the concentration of the multiplicity of non-enveloped viral vector particles is about 1x10⁵ to about 1x10¹³ FFU/ml.
7. The composition of claim 2, wherein the osmolality of the composition, in liquid form, is about 150-800 mOsM.
8. The composition of claim 2, wherein the ionic strength of the composition, in liquid form, is about 10-200 mM.
9. The composition of claim 2, wherein the composition further comprises a buffer, such that the pH of the composition is about 6 to about 9 when the temperature of the composition is about 25° C.
10. The composition of claim 2, wherein the composition further comprises about 10-65 mM arginine.

11. The composition of claim 1, wherein the non-enveloped viral vector is an adenoviral vector.
12. The composition of claim 10, wherein the adenoviral vector is replication-deficient.
13. The composition of claim 2, wherein the non-enveloped viral vector is an adenoviral vector.
14. The composition of claim 13, wherein the adenoviral vector is replication-deficient.
15. A method of preserving a non-enveloped viral vector comprising maintaining a multiplicity of non-enveloped viral vector particles in the liquid composition of claim 1 for a period of about 48 hours, wherein at least about 50% of the non-enveloped viral vector particles in the composition are active at the end of the period.
16. The method of claim 15, wherein the composition is maintained at a temperature of about 25° C for the period of about 48 hours.
17. A method of preserving a non-enveloped viral vector comprising maintaining a multiplicity of non-enveloped viral vector particles in the liquid composition of claim 2, for a period of about 48 hours, wherein at least about 50% of the non-enveloped viral vector particles in the composition are active at the end of the period.
18. The method of claim 17, wherein the composition is maintained at a temperature of about 25° C for the period of about 48 hours.
19. A method of administering a non-enveloped viral vector particle to a host cell comprising contacting a host cell with the liquid composition of claim 1 to infect the host cell with at least one non-enveloped viral vector particle.
20. A method of administering a non-enveloped viral vector particle to a host cell comprising contacting a host cell with the liquid composition of claim 2 to infect the host cell with at least one non-enveloped viral vector particle.

21. The method of claim 20, wherein the non-enveloped viral vector particles are recombinant viral vector particles comprising a transgene which is expressed in the host cell.
22. The method of claim 21, wherein the host cell is in a mammal.
23. The method of claim 22, wherein the mammal is a human.
24. The method of claim 23, wherein the host cell is in a heart.
25. The method of claim 23, wherein the non-enveloped viral vector is an adenoviral vector.
26. The method of claim 25, wherein the adenoviral vector is replication-deficient.

SEARCHED
INDEXED
SERIALIZED
FILED